LaSalle Generating Station
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Exelon Nuclear

RA08-047

August 8, 2008

10 CFR 50.73

United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

LaSalle County Station, Unit 2
Facility Operating License No. NPF 18
NRC Docket No. 50-374

Subject: Licensee Event Report

In accordance with 10 CFR 50.73(a)(2)(v)(D), "Any event or condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to mitigate the consequences of an event," Exelon Generation Company (EGC), LLC, is submitting Licensee Event Report Number 2008-001-00, Docket No. 50-374.

There are no Regulatory Commitments in this report. Should you have any questions concerning this report, please contact Mr. Terrence W. Simpkin, Regulatory Assurance Manager, at (815) 415-2800.

Respectfully,

Shane Marsh
for

David P. Rhoades
Plant Manager
LaSalle County Station

Enclosure: Licensee Event Report

cc: Regional Administrator - NRC Region III
NRC Senior Resident Inspector - LaSalle County Station

NRC FORM 366 (9-2007) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 08/31/2010

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records and FOIA/Privacy Service Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

1. FACILITY NAME	2. DOCKET NUMBER	3. PAGE
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4. TITLE

High Pressure Core Spray System Declared Inoperable Due to Failed Room Ventilation Supply Fan

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
									N/A	N/A
06	11	2008	2008	- 001 -	00	08	08	2008	FACILITY NAME N/A	DOCKET NUMBER N/A

9. OPERATING MODE

1

10. POWER LEVEL

100

11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: *(Check all that apply)*

- ☐ 20.2201(b)
- ☐ 20.2201(d)
- ☐ 20.2203(a)(1)
- ☐ 20.2203(a)(2)(i)
- ☐ 20.2203(a)(2)(ii)
- ☐ 20.2203(a)(2)(iii)
- ☐ 20.2203(a)(2)(iv)
- ☐ 20.2203(a)(2)(v)
- ☐ 20.2203(a)(2)(vi)
- ☐ 20.2203(a)(3)(i)
- ☐ 20.2203(a)(3)(ii)
- ☐ 20.2203(a)(4)
- ☐ 50.36(c)(1)(i)(A)
- ☐ 50.36(c)(1)(ii)(A)
- ☐ 50.36(c)(2)
- ☐ 50.46(a)(3)(ii)
- ☐ 50.73(a)(2)(i)(A)
- ☐ 50.73(a)(2)(i)(B)
- ☐ 50.73(a)(2)(i)(C)
- ☐ 50.73(a)(2)(ii)(A)
- ☐ 50.73(a)(2)(ii)(B)
- ☐ 50.73(a)(2)(iii)
- ☐ 50.73(a)(2)(iv)(A)
- ☐ 50.73(a)(2)(v)(A)
- ☐ 50.73(a)(2)(v)(B)
- ☐ 50.73(a)(2)(v)(C)
- ☒ 50.73(a)(2)(v)(D)
- ☐ 50.73(a)(2)(vii)
- ☐ 50.73(a)(2)(viii)(A)
- ☐ 50.73(a)(2)(viii)(B)
- ☐ 50.73(a)(2)(ix)(A)
- ☐ 50.73(a)(2)(x)
- ☐ 73.71(a)(4)
- ☐ 73.71(a)(5)
- ☐ OTHER

Specify in Abstract below or in NRC Form 366A

12. LICENSEE CONTACT FOR THIS LER

FACILITY NAME	TELEPHONE NUMBER *(Include Area Code)*
LaSalle County Station – Harold T. Vinyard	(815) 415-2203

13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX
X	VD	MO	R165	Y	N/A				

14. SUPPLEMENTAL REPORT EXPECTED

☐ YES *(If yes, complete 15. EXPECTED SUBMISSION DATE)* ☒ NO

15. EXPECTED SUBMISSION DATE

MONTH	DAY	YEAR
N/A		

ABSTRACT *(Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)*

On June 11, 2008, at 0545 CDT, the supply fan for the Division 3 Switchgear Room ventilation system (VD) [VJ] tripped unexpectedly. Division 3 AC power supports the High Pressure Core Spray System (HPCS) [BG]. HPCS remained functional and capable of vessel injection following the loss of ventilation to the Division 3 Switchgear Room; however, HPCS was declared inoperable based on long-term temperature considerations associated with potential heat up concerns of the areas served by the failed ventilation system. Because HPCS is a single train system, this occurrence is reportable under 10 CFR 50.73(a)(2)(v)(D) as an event or condition that alone could have prevented the fulfillment of the safety function of structures or systems that are needed to mitigate the consequences of an accident.

The direct cause of the supply fan trip was a failure of the fan motor stator winding. The apparent root cause was a failure to implement a time-based refurbishment program, which allowed the motor to be in-service beyond the expected lifetime of 20 years. Corrective actions included replacing the fan motor, and updating the preventative maintenance database to require replacement and/or refurbishment of these motors on a 20-year periodicity.

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NARRATIVE

LaSalle County Station Unit 2 is a General Electric Company Boiling Water Reactor with 3489 Megawatts Thermal Rated Core Power.

A. CONDITION PRIOR TO EVENT:

Unit(s) : 2 Event Date : June 11, 2008 Event Time : 0545 CDT
Reactor Mode (s) : 1 Power Level(s) : 100 percent
Mode(s) Name : Run

B. DESCRIPTION OF EVENT:

On June 11, 2008, at 0545 CDT, the supply fan for the Division 3 Switchgear Room ventilation system (VD) [VJ] tripped unexpectedly. Division 3 AC power supports the High Pressure Core Spray System (HPCS) [BG]. HPCS remained functional and capable of vessel injection following the loss of ventilation to the Division 3 Switchgear Room; however, HPCS was declared inoperable based on long-term temperature considerations associated with potential heat up concerns of the areas served by the failed ventilation system. The circuit breaker for the HPCS injection valve, which is a primary containment isolation valve, was opened at 1703 CDT on June 11, 2008, and the valve de-energized in the closed position to comply with Technical Specification (TS) 3.6.1.3 Required Action C.1. Disabling the injection valve affected the function, but not the availability of HPCS.

Troubleshooting identified the cause of the supply fan trip as an age-related failure of the fan motor winding. The fan motor was replaced, and the HPCS system was declared operable at 0608 on June 12, 2008. HPCS was inoperable for approximately 24 hours and 23 minutes.

Because HPCS is a single train system, this occurrence is reportable under 10 CFR 50.72(b)(3)(v)(D) and 10 CFR 50.73(a)(2)(v)(D) as an event or condition that alone could have prevented the fulfillment of the safety function of structures or systems that are needed to mitigate the consequences of an accident. The NRC was notified of this occurrence via ENS at 1748 CDT on June 11, 2008.

C. CAUSE OF EVENT:

The direct cause of the supply fan trip was a failure of the fan motor stator winding. The apparent root cause was a failure to implement a time-based refurbishment program, which allowed the motor to be in-service beyond the expected lifetime of 20 years.

D. SAFETY ANALYSIS

The safety significance of this event was minimal. HPCS remained available and capable of vessel injection if required to mitigate the consequences of an accident. Additionally, the Reactor Core Isolation Cooling System (RCIC) [BN], Automatic Depressurization System (ADS) [SB], and the Low Pressure Emergency Core Cooling Systems (Residual Heat Removal (RH) [BO] and Low Pressure Core Spray (LP) [BM]) were operable throughout the event.

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NARRATIVE

This event constitutes a safety system functional failure.

E. CORRECTIVE ACTIONS

- The supply fan motor was replaced.
- A Service Request will be submitted to perform 20-year replacement/refurbishments of the motors identified in the extent of condition investigation.
- Duty cycle classifications for all 480-volt motors will be reviewed and a periodic 480-volt motor time-based refurbishment/replacement will be implemented.

F. PREVIOUS OCCURENCES

On May 16, 2007, the Unit 2 Rounds Equipment Operator reported an unusually high d/p across the Division 3 Switchgear Room door, making it hard to close. Subsequent investigation found the Division 3 Switchgear Supply Fan not running, while the other Division 3 ventilation fans were running. The fan was successfully re-started per station procedure. No cause could be identified, and the trip was considered spurious.

G. COMPONENT FAILURE DATA

Reliance Nuclear Service 15HP, 1770RPM, 460VAC, 3PH, 1.0SF, 21AMPS Motor

Model Number: 254TCZ

Type: P

Insulation Class: H

Insulation Type: RH

Serial Number: 1YF882360A3 SC